are clean copies of the claims as amended — all presented in numerical order.

Marked-up copies of the amended and new claims appear following the signature page. (In that later presentation, for the Examiner's convenience all the claims, including the new claim, have been placed in the claim sequence at the points where desired — in particular, with claim 52 after claim 50.)

Sub P2

8. (twice amended) An incremental printer for forming desired images on a printing medium, by construction from individual marks in arrays; said printer comprising:

at least one colorant-placing module for marking on such medium;

a first sensor, mounted to said carriage, for determining condition or relative positioning of the at least one colorant-placing module;

a second sensor for making color measurements of mark arrays formed on such medium by the at least one module; and

a mechanism for advancing the second sensor into a measurement position at only low velocity and only low positioning accuracy needed for roughly centering the second sensor over successive colorimetric test-pattern patches in turn;

wherein said low velocity is on the order of 3 cm (1 inch) per second, or less; and said low accuracy is on the order of 1/10 the dimension of an individual mark, or coarser.

9. (amended) An incremental printer for forming desired images on a printing medium, by construction from individual marks in arrays; said printer comprising:

at least one colorant-placing module for marking on such medium;

a colorant carriage for holding and moving the modules over such medium;

a motor and drive train for propelling said carriage over such medium;

a first sensor, mounted to said carriage, for determining condition or relative positioning of the at least one colorant-placing module;

a second sensor for making color measurements of mark arrays formed on such medium by the at least one module;

an auxiliary carriage for holding and moving the second sensor over such medium; said auxiliary carriage being selectively attachable to and detachable from the colorant carriage, but having substantially no drive train other than that of the colorant-carriage drive train;

means for controlling the motor and drive train, while the carriages are attached, to position the colorant carriage and thereby the auxiliary carriage for substantially stationary measurement of such a mark array on such medium; and

a mechanism for advancing a component associated with the second sensor into contact with such medium.

14. (twice amended) An incremental printer for forming desired images on a printing medium, by construction from individual marks in arrays; said printer comprising:

at least one colorant-placing module for marking on such medium;

a first carriage for holding and moving the colorant-placing module over such medium; and

a second carriage, discrete from the first carriage, for use in refining the quality of images produced by the printer;

wherein the second carriage scans a sensor over such medium at only low velocity and only low positioning accuracy needed for roughly centering the second sensor over successive colorimetric test-pattern patches in turn; and

said low velocity is on the order of 3 cm (1 inch) per second, or less; and said low accuracy is on the order of 1/10 the dimension of an individual mark, or coarser.

15. (amended) An incremental printer for forming desired images on a printing medium, by construction from individual marks in arrays; said printer comprising:

at least one colorant-placing module for marking on such medium;

a first carriage for holding and moving the colorant-placing module over such medium; and

a second carriage, discrete from the first carriage, for use in refining the quality of images produced by the printer;

wherein the second carriage scans a sensor over such medium at only low velocity and only low positioning accuracy needed for roughly centering the second sensor over successive colorimetric test-pattern patches in turn;

wherein:

the sensor is a sensor for making color measurements of marks formed on such medium by the at least one colorant-placing module; and

the second carriage also holds at least one reference target for presentation to the sensor.

17. (amended) An incremental printer for forming desired images on a printing medium, by construction from individual marks in arrays; said printer comprising:

at least one colorant-placing module for marking on such medium;

a first carriage for holding and moving the colorant-placing module over such medium; and

a second carriage, discrete from the first carriage, for use in refining the quality of images produced by the printer;

wherein the second carriage scans a sensor over such medium at only low velocity and only low positioning accuracy needed for roughly centering the second sensor over successive colorimetric test-pattern patches in turn; further comprising:

a hood generally surrounding the sensor laterally with respect to a sensing direction; and

a mechanism for advancing the hood along the sensing direction toward such medium.

18. (amended) An incremental printer for forming desired images on a printing medium, by construction from individual marks in arrays; said printer comprising:

at least one colorant-placing module for marking on such medium;

a first carriage for holding and moving the colorant-placing module over such medium; and

a second carriage, discrete from the first carriage, for use in refining the quality of images produced by the printer;

wherein the second carriage scans a sensor over such medium at only low velocity and only low positioning accuracy needed for roughly centering the second sensor over successive colorimetric test-pattern patches in turn; further comprising:

a mechanism for advancing a component associated with the sensor into contact with such medium.

50. (amended) the printer of claim 8, wherein:

the low positioning accuracy is on the order of 0.5 mm (1/50 inch), or coarser.

51. (amended) The printer of claim 14, wherein:

the low positioning accuracy is on the order of 0.5 mm (1/50 inch), or coarser.

52. (new; to follow claim 50) An incremental printer for forming desired images on a printing medium, by construction from individual marks in arrays; said printer comprising:

at least one colorant-placing module for marking on such medium;

a colorant carriage for holding and moving the modules over such medium;

a motor and drive train for propelling said carriage over such medium;

a first sensor, mounted to said carriage, for determining condition or relative positioning of the at least one colorant-placing module;

a second sensor for making color measurements of mark arrays formed on such medium by the at least one module;

an auxiliary carriage for holding and moving the second sensor over such medium; said auxiliary carriage being selectively attachable to and detachable from the colorant carriage, but having substantially no drive train other than that of the colorant-carriage drive train; and

a mechanism for advancing a component associated with the second sensor into contact with such medium.

REMARKS

Applicants thank Examiner Julian D. Huffman for having allowed twenty-five claims and for having indicated that five others would be allowed if suitably amended. Applicants have